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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/633,463

07/31/2003

Charles H. Hoff

7241-1

5445

7590

05/25/2006

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EXAMINER

SOOHOO, TONY GLEN

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,463

Applicant(s)

HOFF ET AL.

Examiner

Tony G. Soohoo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 23-32 is/are pending in the application.
4a) Of the above claim(s) 24-32 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 and 23 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species:

- A. Species of discharge usable with figure 1 shown in figure 3.
- B. Species of discharge usable with figure 1 shown in figure 4.
- C. Species of discharge usable with figure 1 shown in figure 5.
- D. Species of discharge usable with figure 1 shown in figure 6
- E. Species of discharge usable with figure 1 shown in figure 7.
- F. Species of discharge usable with figure 1 shown in figure 8 and 9.

The species are independent or distinct because

The discharge presents different discharge features of a coterminous inner tube and discharge body; a discharge body extending beyond the end of the inner tube; a mixing tube extension.; a mixing manifold with plural inlet ports; 1st and 2nd discharge devices with inlet ports and static mixer. No statement has been made by application that these features or known and obvious variants over one another.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic upon all species.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim

Art Unit: 1723

is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. *If claims are added after the election, applicant must indicate which are readable upon the elected species.*

MPEP § 809.02(a).

2. During a telephone communication(s) with Brett Johnson on May 20, 2006 a provisional election was made WITH TRAVERSE to prosecute the invention of SPECIES A, figure 3, claims 1-6 and 23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Upon review of the election made May 20, 2006, the readable claims are generic to species A and B (figures 3 and 4). Thus, the species requirement directed to the species A and B are hereby withdrawn and are examined together. *Absent any evidence or admission by applicant that Species C through F are obvious variants*, the requirement of an Species Election between of these species is maintained.

Specification

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-6 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to adequately provide support and describe the inner tube and the body end which is "terminating substantially coterminous with one another", as alleged with regards to figure 3. The newly amended specification only points to figure 4 as terminating. Election has been made to figure 3, and applicant alleges that the claim(s) which state a coterminous feature is readable upon figure 3, however the specification does not support this description. Applicant is required to additionally amend such a description in the same manner which applicant has addressed the description of figure 4 in the previous response.

5. Claims 1-6 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to adequately provide

Art Unit: 1723

support and describe the inner tube and the body end which is "without openings between the upstream and downstream ends thereof". The entire disclosure does not even state the word "openings" or any description of the statement of "without openings".

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow 4395131 in view of Fassauer 3804303 and further in view of Winn, Jr. 3741533.

Barlow discloses a system having a weigh hopper 81, storage bin 21, a scale 82, an auger 45, a transport line 85, a means 84 between the with a hopper 81 and transport line 85.

Barlow discloses all of the recited subject matter as defined within the scope of the claims with the exception of 1) the manner in which the delivery line transports the material downstream being pressurized air and having an eductor arrangement, and 2) having a discharge section with a housing and inner tube which has an end which substantially co-terminates with one another and the flow of liquid is provide in the gap to surround the dry particulate and without openings between the upstream and downstream ends thereof.

With regards to the 1st issue of the system, the reference to Fassauer (cited on PTO 1449) teaches a bin 23, metering device there between to a intermediate line 91 which is fed into a transport line 100. The material is conveyed using a blower 98 and an eductor Venturi system 95, 94.

In view of the teaching of Fassauer that one may transport particulate material utilizing air blower and a eductor Venturi system, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the delivery line 85 with a blower at one end and an eductor Venturi system so that material may be effectively transported downstream along the line 85.

With regards to the 2nd issue of the system, Barlow 4395131 in view of Fassauer 3804303 discloses all of the recited subject matter as defined within the scope of the claims with the exception of a discharge device mixing having a housing body, an inner tube for moving particulate through the transport line whereby a gap is formed between the inner tube and the outer body housing which has an end which substantially co-terminates with one another and the flow of liquid is provide in the gap to surround the dry particulate.

The reference to Winn, Jr. 3741533 teaches a mixing device for dry particulate through a central transport 14 inner tube whereby fluid is provided through a gap inside 16 and is formed between the inner tube 14 to provide a curtain of fluid surrounding the central flow of the particulate at the outlet thereby mixing and wetting the material in which the ends of 14 and 16 co-terminate at the same point. It is clearly seen upon reliance of the figures as support by a person having ordinary skill in the art reading the

Art Unit: 1723

disclosure and looking at the figures (in the same manner that applicant has utilized a person having ordinary skill in the art to support by a mere viewing of applicant's figures 3 and 4 to support a coterminous feature) that the inner tube 14 and outer tube 16 from the downstream end near 30, 28 to the upstream end portion at the top of 16 below that of 18 does not have any openings shown. There are no flow arrows shown across the wall of the tubes. The only flow arrows shown are at each end of the tube.

In view of the teaching of Winn, Jr. 3741533 that one may utilize a further device element to mix fluid with a gaseous particulate material by the device discussed above, it is deemed that it would have been obvious to one of ordinary skill in the art to further provide for the device of Barlow, as modified above, with such a mixing device for dry particulate and liquid so that the materials may be further processed into a wetted material or fluidized component slurry or liquid.

With regards to the claims 2-6, the combination of Barlow in view of Fassauer and Winn, Jr. discloses all of the recited subject matter as defined within the scope of the claims with the exception of having plural bins, respective plural weigh hoppers, respective introducing means to the transport line, respective scales, respective transport lines.

The Barlow as modified discloses all of the recited subject matter as defined within the scope of the claims with a single example of a bin, scale, hopper, transport lines as discussed above with the exception of the provision of plural provisions of the respective structure to provide a plural transport of plural materials.

Art Unit: 1723

Whereby it is a old and well known technique of material processing to utilize plural machine respective components to provide a duplication of operation so that plural components may be processed by a device, and since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art, *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8., it is deemed that it would have been obvious to one of ordinary skill in the art to duplicate the bins, weigh hopper, introducing means to the transport line, the scale, and transport lines of Barlow such that the device of Barlow, as modified, has plural bins, respective plural weigh hoppers, respective introducing means to the transport line, respective scales, and respective transport lines so that plural materials may be processed and delivered.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow 4395131 in view of Fassauer 3804303 and further in view of Winn, Jr. 3741533 as applied to claim 1 above, and further in view of Pomerleau 2746728.

Barlow 4395131 in view of Fassauer 3804303 and further in view of Winn, Jr. 3741533 discloses all of the recited subject matter as defined within the scope of the claims with the exception of the inner tube having a flange which acts as a nozzle to accelerate the liquid flow between the inner tube and the inner body.

The reference to Pomerleau teaches that an inner tube 2 and outer body 7, 10 may have a section flange 3,4 which provides an accelerated flow in the flared lower extension to provide a venturing effect, column 2, lines 45-49.

In view of the teaching of Pomerleau that one may flare the inner tube to produce a Venturi effect between the inner and outer pipe to enhance flow, it is deemed that it would have been obvious to one of ordinary skill in the art to modify the Barlow reference as modified by Fassauer 3804303 and further in view of Winn, Jr. 3741533 such that the inner tube is flared so as to provide a better flow of liquid as it exits the tube.

Response to Arguments

9. Applicant's arguments filed 3/17/2006 have been fully considered but they are not persuasive.
10. Applicant on page 14 states that Claim 1 has been amended to further recite that the inner tube and body each extend continuously without openings between the upstream end and the downstream end. Applicant states that the Winn reference fails to **explicitly** disclose that the tubes extend continuously without openings by the statement: "Winn clearly fails [sic, read as "fails"] to disclose the claimed mixing device having an inner tube and an outer body extending continuously without openings between the upstream and downstream ends thereof". It is noted that the Winn reference does not explicitly teach the use of openings between the inner and outer tube between the lower discharge end and the upper inlet end. Thus there is no evidence that the Winn reference does not read upon the claimed feature in question. In fact applicant does not originally disclosed written features of a "coterminous" ends, nor has provided evidence of original text that there are "no openings" on the tubes.

Art Unit: 1723

Does applicant believe such omission in the written description as basis not non-support of the invention claimed, however shown in the drawings, in the same manner that the Winn reference shows in the drawings features which have not been expressly written out in text?

11. Applicant argues with regard that the Pomerleau reference utilized the deflector Venturi element to accelerate air, rather than liquid. In response, the teaching of the Venturi effect to a person having ordinary skill in the art is applicable to all fluids, inclusive of gas (air) or liquids. The Pomerleau reference utilized as a showing that the construction of an inner and outer tube whereby the inner tube is flared to utilize a commonly known effect of a Venturi effect. Reasoning and motivation has been addressed by the examiner for the combination of such an addition of the flow increasing feature of the Venturi flared deflector as been discussed in the rejection above.

Conclusion

This is a RCE of applicant's earlier Application No. 10/633,463. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


Art Unit: 1723

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 7-5PM, Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tony G. Soohoo
Primary Examiner
Art Unit 1723